

# THE JUVENILE INSTRUCTOR.

HOLINESS TO THE LORD.



VOL. XIII.

SALT LAKE CITY, OCTOBER 15, 1878.

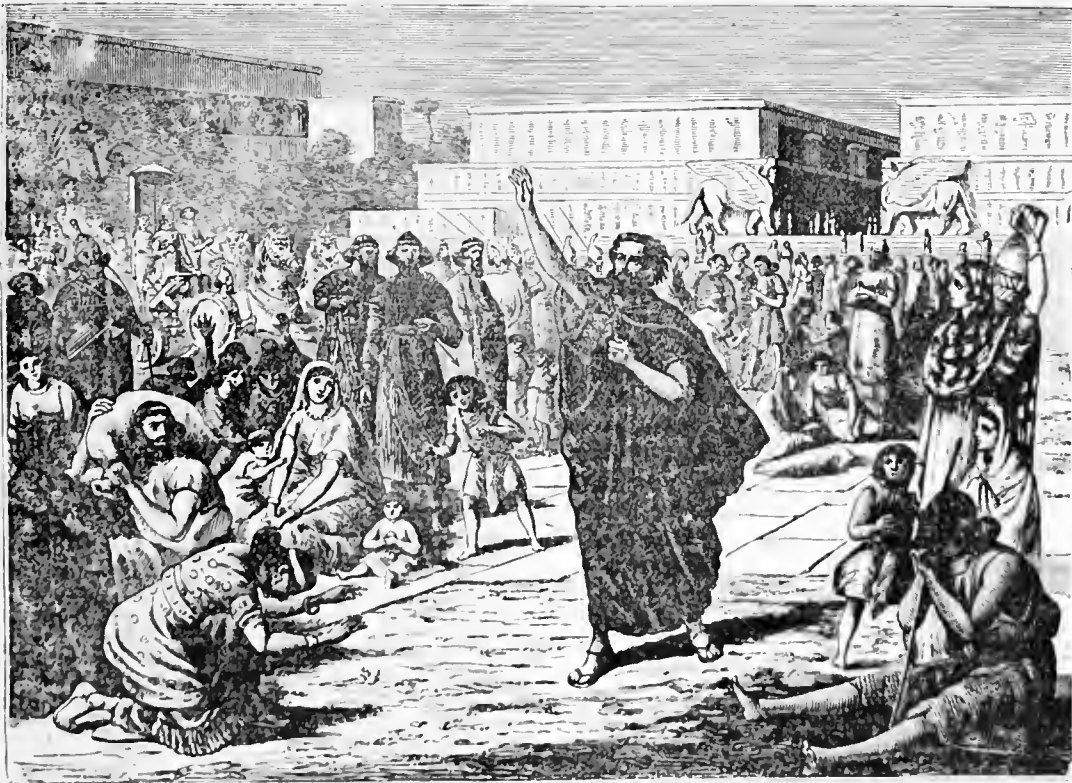
NO. 20.

## JONAH PREACHING TO THE PEOPLE OF NINEVEH.

**T**HE prophet Jonah, the Bible tells us, was the son of Amittai, and a native of a town called Gath-hepher, which you will find on the map of Lower Galilee, on the borders of the land that belonged to the tribe of Zebulun, and which is now represented by the village of El-Mushhad. He prophesied during the reign of Jeroboam II, king of Israel, it

was sent among the heathens. "Arise, go to Nineveh, that great city, and cry against it, for their wickedness is come up before Me." was the word of God that came to him.

Nineveh was the capital of the great kingdom of Assyria, known to us in Bible history as the country of the proud and boastful kings, Tiglath-Pileser, Shalmaneser, and Esarhaddon,



is thought, not very long after the time of Elijah and Elisha. And so, though in order his book stands the fifth amongst the books of the minor prophets, he was really the earliest of all the prophets whose writings we possess, prophesying before either Isaiah or Jeremiah, whose books come the first.

Some of the prophets were called to prophesy against their own countrymen, the people of Israel or Judah; but Jonah

the powerful enemies of the kingdom of Israel.

In the time of Jonah, Pul, it is thought, was the king of Assyria; and Nineveh, his capital, was in the height of its glory. A very large and splendid city it was, with its towering walls, its strong gates, its numerous turrets, its magnificent palaces, and its noble statues; and its inhabitants ranked among the richest of the Assyrians. It had, however, become as

wicked as it was grand; and the anger of God was kindled against it. The time had come when, if it continued in its wickedness, it must be destroyed. But its teeming population called forth the pity of the great Father in heaven, and He resolved on first sending one of His servants to warn them of their impending fate; and Jonah was told to go and cry against it.

But the prophet Jonah failed. He decided to "flee from the presence of the Lord." So, instead of going to the Assyrian capital, he hurried down to Joppa, a famous port on the coast of the Mediterranean Sea; and, finding there a vessel about to sail to Tarshish—probably a busy city of the merchant Phœnicians, in the south of Spain—he paid his fare, jumped into the ship, and wiping the perspiration from his throbbing brow, went "down into the sides of the ship," and thinking that there, at least, he would be unobserved, he lay down to rest.

But he had forgotten that, by his power, God was everywhere present, and that, even in the darkest corner of that strange ship, out at sea, his thoughts were as plainly discerned as if they had been exposed in the light of the sun. No ship could carry him away from the presence of the Lord. The most secret spot could not hide him.

Soon there arose "a tempest in the sea," so mighty that every moment it threatened to dash the vessel in pieces, and overwhelm its terrified crew. The mariners were heathens—Phœnicians, most probably—yet they knew that in the midst of so wild a storm there was no help in themselves; if they obtained any, it must come from some other source. So they all cried aloud, every one to his own god; and to lighten the vessel they threw out the valuable goods that they were taking to Tarshish. But the storm did not abate, and they concluded that one of their company must surely have committed some dreadful crime, and that his god was punishing him for it.

And how must they find out who it was? they wondered. The master of the ship woke up Jonah, whom he was surprised to find sleeping, and told him to call, like the rest, upon his god, and as the storm still raged on, they agreed to cast lots, that they might find out who was the offender.

"The lot fell upon Jonah," the Bible goes on to say; and the wondering sailors gathered round the conscience-stricken prophet.

Who was he? what was his business? and where had he come from? and to what nation did he belong? they wanted to know.

Then Jonah told them his story—how he had been commanded to go to Nineveh, and how he had been trying to flee from the presence of the God of Israel.

That the storm had been sent on Jonah's account, they were now all quite sure. And as the waves lashed the sides of the vessel still more furiously than before, they asked what they must do to him.

"Take me up, and cast me forth into the sea," he said; "for I know that for my sake this great tempest is upon you."

Of the great God of Israel they had often heard, and they feared to cast one of His prophets into the heaving waters; but, compelled by the fury of the storm, they at length "took up Jonah, and cast him forth into the sea." Instantly the storm ceased. The sailors had no doubt as to who had sent it, and they offered sacrifices to the God of Jonah.

But God was not going to punish Jonah with death. He was only trying to teach the erring prophet a lesson of obedience that must be learned. He, therefore, sent to the surface of the water a great fish, which immediately swallowed up Jonah.

Then down, and down, and down the enormous fish went into the awful depths, till, as Jonah's book says, he "went down to the bottom of the mountains," and "the earth with her bars" was about him forever.

And now who could deliver him? Must he stay in that horrible abode, and die an awful and lonely death, while his friends at Gath-hepher were searching for him far and wide? Oh, if he might but come out of his horrible prison-house! If he might once more stand free upon the sea shore, and see again the blessed light of heaven! Quite hopeless his case seemed; but Jonah knew what wonders the Lord had done for his forefathers, and how merciful He always was towards His repentant people; and he prayed earnestly for help.

Very soon help was sent; for, at the command of God, up came the sea-monster to the surface of the water, and swimming to the shore, cast Jonah upon the dry land.

It was a whale, was it not? some of our young readers are asking.

In our present translation of the Bible, it is called a whale; but an ordinary whale has too small a throat to allow of its swallowing a man; and the Hebrew word in the original stands not only for whale, but for any monster of the sea. The white shark—the dreaded enemy of sailors—is supposed by some to have been the fish, for monsters of this species were then common in the Mediterranean Sea; and with the greatest ease they could swallow a full-grown man, for some of them were as long as thirty feet. In one ugly thing that was captured was found the whole body of a man in armor; in another was discovered a whole horse; while a third has been known to contain the entire skin of a buffalo, besides many other articles.

But to go back to Jonah. When he stood safely upon the sea-shore again, the command came a second time, "Arise, go unto Nineveh, that great city, and preach unto it the preaching that I bid thee."

Jonah, not daring again to disobey, went to Nineveh, and entering into the heart of the city, cried with a loud voice, "Yet forty days, and Nineveh shall be overthrown!"

The terrible warning reached the king, who most likely had heard of Jonah's miraculous escape, and therefore believed him to be a real prophet; and "he arose from his throne, and he laid his robe from him, and covered himself with sackcloth, and sat in ashes." And all his people with him fasted, and wept and prayed. Then the Lord, seeing their repentance, spared the city. But Jonah, instead of being pleased at this, was discontented. He was glad when mercy was shown to himself, or to any of his own people; but, like some of the Jews of after days, he did not think that God's mercy should be extended to the heathens; and perhaps, also, he was afraid that, when the threatened judgments did not descend upon Nineveh, he should be esteemed as a false prophet.

Sitting in a booth that he had made for himself, on the east side of the city, he still anxiously waited to see what would become of it, thinking that perhaps, when God saw his displeasure, He would yet destroy it. But no. Jonah had still another lesson to learn—that God was the God of the Gentiles as well as of the Jews, and that His loving care was over all His creatures. And the way that he was taught was this. During the night God caused a gourd to grow up suddenly, and twine around Jonah's booth, so as to effectually shade him from the sun's rays, which were terrible to endure. In the morning, Jonah was very pleased when he saw the gourd, and was thinking how comfortable he would be all the day, when a worm attacked it, and it died as suddenly as it had sprung up. Then Jonah was very angry; and God said

that if he had pity on the gourd, which he had neither planted nor trained nor cared for in any way, and which had lasted so short a time, should not He, the creator and preserver of all, spare Nineveh, with its scores of thousands of men and women and little children?

The people of Nineveh, however, were not long spared, for they soon returned to their sinful practices, and the Lord suffered the armies of the Medes and Babylonians to destroy it. Reduced to a mass of ruins, the city, which in its pride had been so grand and extensive, gradually became overgrown, and covered with sand, until even its exact location was not positively known. But recent explorations have brought to light the relics of its ancient grandeur, as well as proofs of the foolish idolatry of its inhabitants.

## Biography.

### JOSEPH SMITH, THE PROPHET.

(Continued.)

OUR last number closed with a prediction of Joseph's. He prophesied "that the Saints would continue to suffer much affliction, and would be driven to the Rocky Mountains, many would apostatize, others would be put to death by our persecutors, or lose their lives in consequence of exposure or disease, and some of you will live to assist in making settlements and building cities, and see the Saints become a mighty people in the midst of the Rocky Mountains."

This prediction was delivered August 6th, 1842. Few could realize then that it would be fulfilled in so short a time. The Saints continued to suffer much affliction, many apostatized, others were killed by their persecutors, others lost their lives through exposure, being driven away from their homes by mobs, and others have lived to reach the Rocky Mountains; have assisted in making settlements and building cities, and have seen the Saints become a mighty people here. Joseph himself did not live in the flesh to see his own prediction fulfilled; but we live to see it brought to pass even as he spoke it, and we should be thankful to the Lord for permitting us to exist in a day when His word has been revealed to His servants and they have made it public.

Great excitement had been raised throughout the States by the falsehoods put in circulation by John C. Bennett and others. Joseph felt that it was wisdom in God that the elders should go forth and deluge the States with a flood of truth. He wished them to set forth in plain terms the mean, contemptible, persecuting conduct of ex-governor Boggs, of Missouri, and those connected with him in his corrupt proceedings, so that the world might understand the course taken by the enemies of the Saints. He advised the Twelve to call a special Conference on the 26th of August, 1842, to give instructions to the elders who should be selected for this important mission.

During these days Joseph had to keep himself concealed from his enemies. They were anxious to get hold of him. But on the day of this Conference he made his appearance on the stand, much to the delight of the people. Various opinions had been indulged in as to where he was; some had supposed that he had gone to Washington, others that he had started

to Europe, and others that he was in the city. He and the people were all filled with thanksgiving and rejoiced to be together in conference again. He congratulated the people on the victory he had once more gained over the Missourians. He had not fought them with the sword, nor with carnal weapons; he had done it by stratagem, by outwitting them. There had been no lives lost, and there would be no lives lost, if they would hearken to his counsel. Up to this day, he said, God had given him wisdom to save the people who took counsel. None had ever been killed who followed his counsel. He said, "we want to whip the world mentally, and they will whip themselves physically."

After Joseph's address an indescribable transport of good feeling was manifested by the assembly, and about three hundred and eighty elders volunteered to go on the proposed mission.

On September 1st he wrote an address to the Saints on the subject of baptism for the dead. In that address he informed the Saints that inasmuch as the Lord had revealed to him that his enemies, both in Missouri and Illinois, were again in pursuit of him, for his own safety and the safety of the people he had thought it wisdom to leave Nauvoo for a short season. He wrote cheerfully and encouragingly to them, saying that he gloried in tribulation. On the third of that month a deputy-sheriff and two other men came, in a sneaking manner, and stole into Joseph's house. Though they had no search warrant, they insisted on searching the house; but they did not find him. This conduct of theirs was in direct violation of the Constitution of the United States: but what did they care? Joseph was what they would call "the Mormon Prophet," and they would do as they pleased with him, law or no law. They were well armed, and they had said they intended to take him dead or alive. But the Lord delivered him out of their hands, for as they came into his house Joseph passed out of the back door, and through the corn in his garden to Bishop Newel K. Whitney's. It was said there were fifteen of them altogether, and they started from Quincy with the intention of reaching Nauvoo in the night and falling upon the house unawares; but it was reported they lost the road and got scattered and could not get along until daylight. After night Joseph left Bishop Whitney's, which was too public and exposed, and went to Brother Edward Hunter's.

On the 6th Joseph wrote another epistle to the Saints, giving further instructions respecting baptism for the dead. This made a deep and solemn impression on the Saints, and they manifested their intention to obey the instructions to the letter. Joseph sent word to those of the Twelve who were going on missions that he wished them to labor in Illinois and to preach against mobocracy. On the 10th he concluded to return to his own house again, thinking he would be safe there. On the 2nd of October word reached Nauvoo that Governor Carlin had offered a reward of \$200 for Joseph, and \$200 for Orrin Porter Rockwell. Governor Reynolds of Missouri also offered a reward of \$300 apiece for them. Carlin was determined to have Joseph, if he could be taken, carried to Missouri.

Reports from various quarters reached Joseph that Carlin intended to have him arrested with an illegal writ, hoping to draw him to Carthage to get acquitted by *habeas corpus* by Judge Stephen A. Douglas; then he would have men waiting with a legal writ to serve on him as soon as he was released under the other one, and bear him away, without further ceremony, to Missouri. Many of the Missourians were also coming to unite with the militia of Illinois of their own free will, and at their own expense, so that if they did not take him there, they would come and search the city. These were reports

only; but Joseph knew very well that his enemies were capable of taking these measures to get him into their power, or any others that might be suggested to them. On October 7th he concluded to leave his home again for a short season. After a tedious journey of one night and part of a day, which he made in the company of several of the brethren, he reached Father Taylor's, the father of President John Taylor. He remained there nearly two weeks, and then he returned to Nauvoo to see his wife whom he left sick. He went back to Father Taylor's the next day, and stayed another week. On the 28th of October he returned to Nauvoo. The Saints were much rejoiced to see their Prophet again in their midst. It was through such scenes as these that Joseph constantly passed, to establish that gospel which we enjoy so peacefully.

(To be Continued.)

## THE GOSPEL PRINCIPLES.

BY DANIEL TYLER.

IT may seem strange to some of our readers, and especially the young, that there should be so many different Christian denominations, and all teaching different doctrines. One would naturally conclude that almost any person of ordinary ability could understand plain, simple language, such as is found in the Old and New Testaments, which they all profess to believe. Still more strange does it appear when we learn the fact that educated men, who have spent the best part of their lives in the study of literature and religion, differ more widely on religious points than the common people; yet such is the case.

Those differences among learned religionists in olden times were attributed to a species of insanity, as the term is often used in our day: "He is religiously insane." Hence it was that a learned judge once said to St. Paul, "Much learning hath made thee mad." The word mad is here used for insane, vulgarly called crazy, which signifies the same thing.

The learned ministers under the Mosaic law were just as much in the dark as are the present Christians. One of those devout preachers being impressed with the divinity of Christ's mission, more on account of His miracles than of the truths He taught, went to Jesus by night and asked the Savior about the plan of salvation. He was told that "except a man be born again he cannot see the kingdom of God." The minister thought this a new and strange doctrine, and asked a further explanation. He was then told that after a person had been born again to see the kingdom, he must be born of water and of the spirit in order to enter into it. It was too great and too mysterious for the learned priest, or rabbi, as Nicodemus was called. He could not comprehend it. Jesus told him the reason was, that he was not born of the Spirit. He said "The wind bloweth where it listeth, and thou hearest the sound thereof, but canst not tell whence it cometh, and whither it goeth; so is every one that is born of the Spirit." The man knows that he has felt the divine influence as well as you know when you inhale a gentle breeze of air; but if you have never had that Spirit, he cannot tell it to you so that you can comprehend it, any more than you could explain to an unborn babe the sensation of the atmosphere of this world. It must be felt to be understood.

St. Paul says, "The things of man knoweth no man but by the spirit of man that is in him; even so the things of God

knoweth no man but by the spirit of God." The same Apostle says, "The Spirit searcheth all things, yea even the deep things of God." For this reason, when Jesus arose from the dead, and did not design to remain much longer with His disciples to tell them just what to say to the people, He would not allow them to preach in their uninspired condition, lest they should, without that Spirit, lead the people astray, as uninspired men do now. He told them to tarry or wait at Jerusalem until they were endowed with power from on high; or, in other words, until they were born of the Spirit, having already been born of water.

The reason, then, that this generation of so called Christians but really infidels, do not understand the gospel plan as it is, is because they have not the spirit of God. There is a passage of scripture to the effect that the wisdom of this world cannot find out God. That those professing to be wise have not the Spirit of God, which is inspiration and revelation to those who enjoy it, must be plain to everyone, from the fact that they claim that all of the gifts and graces which anciently attended the Holy Ghost are done away, and no longer needed. No matter how plain the plan of salvation is, it requires the Holy Spirit to understand it. So say the scriptures, and the experience and observation of all our Elders are that the doctrine herein set forth is correct. Kind reader, if you have not done so, repent and be baptized for the remission of your sins, and receive the gift of the Holy Ghost, by the laying on of hands by proper authority, that you may the more fully learn how to be saved; for on those conditions "the promise is to you, and to your children, and to all that are afar off, even as many as the Lord our God shall call." Do "not neglect so great salvation." You cannot obtain it in any other way.

START A LIBRARY.—The gentle Elia tells us, in one of his delightful essays, that when he and his sister had planned and saved, and were at last able to purchase a coveted book, which they carried home in triumph, the possession gave them more delight than whole shelves full of books they were able in later life to purchase without any self-denial.

If you want to make a good book a real joy to you, purchase it with your own earnings. I would urge every boy and girl to get a few good books. Make them the nucleus of a library that will be a source of great improvement and lasting pleasure in after years.

I would emphasize the word *good* book, for a poor, trashy book is worse than none. You can read better things from the great book of nature God has spread out before you than can be found in such volumes, or you can sit in your room and think better than such authors write.

A good library, if only of a few books, filled with noble, stirring thoughts, is a sheet-anchor to many a youth exposed to the thousand snares that beset young footsteps. Compare an evening by one's own lamp, spent in the companionship of a good book, to one spent in sauntering out in darkness with a roystering set of companions, and then multiply that by a hundred such evenings. Where would the young man be likely to stand mentally, morally and physically at the end of a year, in one case and in the other?

Then do not grudge the money that a good book costs, if you can by pinching and saving compass the purchase of it. A book that will open new fields of thought, and prove of lasting practical service, will always be found most profitable; and when you have found a volume that you can feel really does you good, read and re-read it.



## Travels in India.

BY WILLIAM FOTHERINGHAM.

(Continued.)

IN due time, a "peon" brought a "chit" from Mr. Brown, informing us that he had secured a room in the part of Delhi known as Duryagunge.

We had notices written and circulated among the Christian population residing in that vicinity, announcing the meeting. When the time of meeting arrived, we found the place lighted and amply seated to accommodate the congregation, which was composed of ten individuals. After meeting we distributed pamphlets among our hearers, and sold books to all who wished to purchase.

We told them where and how we were living, and asked if any person present would arrange to lodge or board us for the time being. A gentleman by the name of McNally stated that he was not situated to lodge us, but would furnish us breakfast and dinner each day, until such time as we could better our condition, which proposition we readily accepted. At our next meeting we had about the same number of auditors; but they subsequently dwindled down until no one came out to hear.

The old college, our residence, being located in a different part of the city to Duryagunge, we concluded to convert it into a chapel. The floor of our room was composed of cement, and badly riddled with rat holes. For thirty cents we purchased matting, in the bazar, to cover it, which made it look quite respectable. We borrowed a few chairs from a neighbor, and fixed up for business. We again sent out our circulars, notifying the Anglo-Indians of the time and place of holding meetings. Our success was similar to what we experienced at Duryagunge. On one occasion only three persons came out to hear us, one of whom went to sleep, and we had to spend our time in preaching to the two who were awake.

After we had made every effort that was necessary to get the few Christians out, and failed, we adopted the mode referred to in our operations in Meerut, that is, of distributing pamphlets and selling books, realizing about the same result as in Meerut. We visited Mr. McNally's twice each day to obtain our meals. He lived a mile or so from the old college. We found him to be a bachelor, who kept a servant, also a horse and "gharry." He had an extensive acquaintance among the whites in the city, and was frequently invited to dinner and tea parties. He invariably took us with him to such parties, and introduced us as "Mormon" Elders, from Salt Lake City, Utah. This gave us an opportunity to mingle with society that we could not have reached otherwise. On such occasions, a portion of our time was generally occupied in answering questions and defending the principles of the gospel against the attacks of the bigoted.

Our friend, McNally, took us around to many of the places of note. We also went around the city on the top of the walls that enclose it, which are seven miles in circumference, and which I will describe in a future chapter.

We visited the "reverend" Mr. Jennings, a chaplain. He invited us into the house; but Elder Woolley had no sooner told him who we were than he commenced with a tirade of abuse, in which he shouted at the top of his voice, and railed at "Old Joe Smith, the impostor!" accused us of "preaching

beastly doctrines" and "principles which were nothing but a dogma," "believing that Joe Smith was a prophet," and that God was "a material being," and practicing a plurality of wives, etc. He went on in this strain until he became somewhat exhausted. Mr. Jennings was in his own house, nevertheless, as soon as we had an opportunity, we told him plainly what we thought of him, and bore our testimony concerning the work of God, revealed to man through the instrumentality of the prophet Joseph Smith.

As soon as the reverend gentleman recovered his breath he politely told us we were not needed, and called upon us to repent, and cease to preach false doctrines. We replied that if he did not repent, and that speedily, and get in possession of a more Christian spirit, the wrath of Jehovah would overtake him.

This was in December, 1853. On the 11th of May, 1857, the mutinous Sepoy troopers arrived in Delhi, from Meerut, a party of whom rushed to the Rev. Mr. Jennings' and cruelly put him and his daughter to death. They were the first victims of this direful carnage, which terminated in the destruction of all the whites in Delhi, except a very few who made their escape into the nearest jungle, and they passed through untold sufferings before they reached a place of safety. Meerut and other stations also suffered severely.

I do not mention this out of any animus or ill feeling, nor do I exult over the calamities that befel this proud and haughty people, who scornfully turned a deaf ear to the message of salvation, which God, through His servants, sent unto them; but rather that it might have a tendency, at this late hour, to draw out the minds of the youth in contemplation of the great work of God, and the fearful retribution that is awaiting all those who will reject the message sent unto them. It matters not whether they are high or low, rich or poor, if they mock God, and reject His message, they do so to their own condemnation. The people of our own nation, as well as others, have had the gospel of repentance, and the command to flee from the wrath to come, proclaimed to them for nearly a generation, by the Elders of Israel; but they, instead of receiving the message with joy and gladness, have contemptuously spurned it from them. A superficial observer might suppose the nations of the earth are prospering; but it is not so. They are filled with weakness, consumption and rottenness, and their dissolution is almost at hand.

Elder Woolley and I often felt impressed that God would shortly humble the pride of the people of Upper India, for they were scornfully proud. While in Delhi, we occasionally accompanied Mr. McNally and others to the parade ground to witness the military manoeuvres of the Sepoy soldiers. There was a park of artillery which was worked by native artillerymen, under English officers, also cavalry and infantry, who were commanded by European officers, and were well skilled in the science of war. There were also squads of recruits fresh from the country, still in their breech-clouts, under their respective drill masters, who were teaching them how to step. On one occasion Mr. McNally and others were admiring the fine physical forms, and military bearing of the native troops, remarking that they were a strong bulwark to the British power in India. We replied that the day would come when the Sepoy troops would bayonet the whites to the heart, with the queen's bayonets. But they did not believe a word of it.

(To be Continued.)

Help yourself, and others will help you.

## The Juvenile Instructor.

GEORGE Q. CANNON, - - - - - EDITOR.

SALT LAKE CITY, OCTOBER 15, 1878.

### EDITORIAL THOUGHTS



OUR Conference which has just closed has been a very interesting one, and much valuable instruction has been given. The little boys and girls who read the INSTRUCTOR, when they get to manhood and womanhood, will be able to look back to these days and measure the progress they have made therefrom. By the time they become men and women they will see great changes among the Later-day

Saints, and we hope they will be changes for the better. The Lord wants His people to be united, and the Apostles are laboring to make them so. Brother Brigham started co-operation, and we have been working for years in that direction. He told us that it was the will of the Lord that we should co-operate together, and the people have done so much more since then.

There have been some failures and some errors, but still the principle of co operation is believed in now more than ever.

At this Conference steps were taken to organize a board of trade, which is to be called Zion's Board of Trade. This is a most excellent plan if it shall be properly carried out. Good business men are selected to form this board of trade, and they are to take into consideration all matters connected with our trade and manufactures and productions in this country.

There will be a board of trade organized in every Stake, and each Stake will send a member to Zion's Board of Trade whenever important business shall require them to be present. In this way the people's interests will be tied together, and every part of the country and every branch of business, especially of home manufactures, will receive proper attention and be fostered.

The Lord has commanded his people to enter into the United Order. Brother Brigham said during his lifetime that it was the mind and will of the Lord that we should do so, and we should all aim to reach that point. We cannot become perfect in one day nor one year, but if we work together and have this object in view we will get nearer and nearer to perfection every year. The Latter-day Saints should be like one family. They should look after each other's interests. The whole world is opposed to the work of God, and if it could be destroyed very many people would be pleased thereat. There are very many honorable people in the world who would not do us any injury and would be content to let us live, but they are few and they cannot be heard. The great bulk of the people would willingly see the Church of Jesus Christ of Latter-day Saints destroyed. Therefore, how necessary it is that we should be united, for if we are not united we are not the Lord's, and He will not shield us from our enemies.

Every boy and girl in this Church should think about these things, and as they grow old enough to labor, they should think about others as well as about themselves. To live for one's self alone is a miserable life. It is thoroughly selfish, and no

one can be really happy who thinks only about his or her own comfort or happiness. Of what benefit to the world is a man who only thinks about himself, his own ease and gratification and makes no effort to help or benefit anybody else. If he lives he is no particular blessing to any person. Should he die nobody misses him. Jesus, our Lord and Master, came and lived for all and died for all. His life was spent in doing good to others. This was his happiness. He has set us the example. Every Latter-day Saint should do likewise, and every boy and girl should grow up with the desire within them to be a benefit to others as well as to themselves; and if they benefit others they are sure to be benefited themselves.

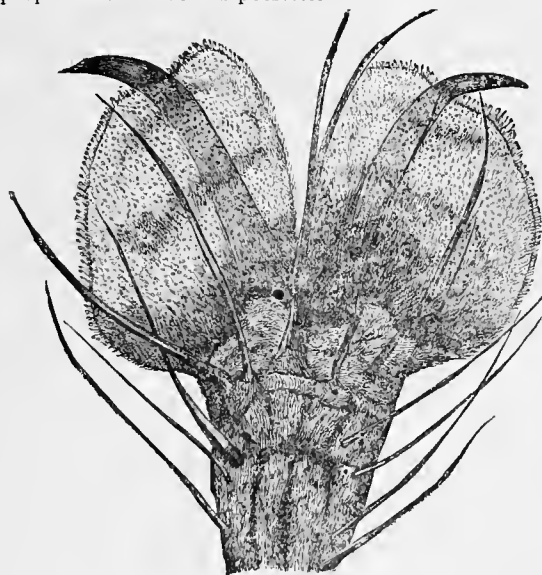
CATHOLICS, Episcopalians and other sects have come here, bringing money with them, to establish good schools, in order to draw away the children of the Latter-day Saints. They make their schools attractive, having good teachers, and in some instances teaching music, drawing, painting, and other accomplishments, and hope thereby to get the patronage of the Latter-day Saints. The teachers of these schools are sure to gain influence over the scholars, and children are liable to be weaned from their own people and from their own Church by the influences brought to bear upon them. Latter-day Saints should be fully awake to this danger. The Church was driven out from the midst of the people because they hated us. They would like to have destroyed us, but the Lord did not permit them. We have made these valleys attractive and beautiful. Now the world come here to use their arts to destroy us, and the Latter day Saint who would send his children to teachers who come here belonging to other churches cannot be fully alive to the dangers to which he exposes them. What is proper for us? We should make our schools as attractive as they possibly can be. We should aim to furnish our children in our schools as many attractions and branches of study as they can obtain anywhere else. We should seek to teach our children accomplishments and at the same time teach them the truth and bring them up in the fear of God, not leaving them to false teachers to impress their minds with prejudice against the truth. This would be folly for us, who have the truth, and who know that we have it pure from the Lord. Our schools should be of such a character that our children need not leave them to go elsewhere to learn something that they cannot learn there. Everything that is truthful and honorable and attractive and that leads to make the people useful should be taught in our schools, and we hope to see the day when our schools will be as far ahead of other schools as our religion is ahead of all so-called religions.

THE Vatican is the palace of the popes at Rome. Early in the decline of the empire, the Christian bishops established their residence on the Mons Vaticanus; hence its name. Of the ancient condition of this episcopal palace, little or nothing is known. It was inhabited for a short time by Charlemagne; and a long succession of popes enlarged and adorned it with the wealth poured into the pontifical coffers by all Christendom, until it became at length in many respects the most extraordinary edifice inhabited by man. It is said to cover a space about 1,200 feet in length by 1,000 in breadth, and to comprise about 4,000 apartments. If placed in a continuous line, its suite of galleries would extend two miles in length! It contains a countless multitude of inscriptions, statues, busts, urns, and vases, to say nothing of its literary treasures. It is the richest museum in Europe, and its treasures are magnificently lodged. The library contains about 80,000 printed books, and 35,000 manuscripts.

# HOW A FLY WALKS ON THE CEILING.

WE all know that it is a very common thing to see flies walking with ease up the slippery window-panes, or even quite upside down, head downwards, on the ceilings of our rooms. They even seem to prefer the latter position, no doubt because they are fond of warmth, for the heated air is constantly moving upwards, and the ceiling is the hottest place they can find.

It is such an ordinary thing to see flies walking about, upside down, that little folks—yes, and big folks, too—pass it by without pausing to consider that there is something strange in it—something peculiar and wonderful in the fact of a living thing being able to move briskly about in such fashion without falling down and hurting itself. We are well aware that we could not even attempt to do so without the most disastrous results. Even in the act of stooping to reach anything from the ground, if it be continued for any length of time, a certain uncomfortable feeling about the head warns us to resume our proper level as soon as possible.



THE FOOT OF THE HOUSE FLY, SHOWING THE OVAL FLAPS STUDDED WITH MINUTE HAIRS.

Several years ago, a certain acrobat professed to walk about head downwards, and many persons went to see his performance, curious to find out how he would manage it. Well, he did it in this way: a strong wooden pole was hung about twenty feet above the floor of the place, and on this pole, at regular distances, were hung loops of leather. Into these loops the acrobat, with great difficulty, and evident risk of falling, contrived to place each foot alternately, and in this way he was able to fulfill his promise of walking head downwards.

Now there was in this performance a certain amount of cleverness or cunning, in successfully trying to evade a natural law. Yet all that was done was this: that a man succeeded in doing, in a very clumsy and imperfect manner, a thing which a common little house fly is constantly doing without the help of loops or any machinery but that belonging to its own body.

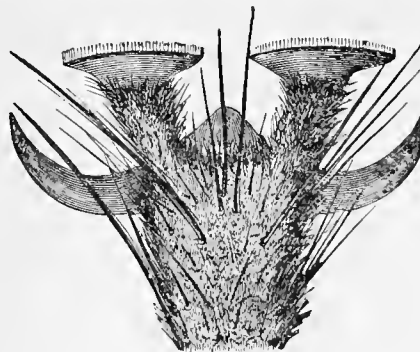
Let us see if we cannot learn something about this faculty which the fly possesses, and which is denied to us. Now, the best way of seeing into a thing is to use one's eyes; and as we cannot very well follow the quick motions of a fly at the near-

est distance at which he will allow us to watch him, we will commence operations by obtaining a fly's leg.

It is quite evident that we cannot make much of this little thread-like leg now that we have it, for it is far too small for us to find out the nature of its structure, or rather, perhaps we ought to say, that our eyes will not, without help, tell us anything about it. Luckily, we have such a help in the microscope, an instrument which makes little things look like very big things. But as few little folks are likely to possess a microscope, or, at any rate, one powerful enough for the present purpose, we have here two pictures of the fly's foot as it appears when seen through a powerful microscope.

The first picture shows you what you would call the sole of the fly's foot. How different it is from what we might have expected! Fancy how very tiny all those hairs must be, for you must remember that the drawing is many hundred times as big as the foot itself. But the most peculiar part of the foot is not the hairs, nor those two big claws—for most insects are furnished with these—but the two half-transparent oval flaps, through which we can almost see the claws.

If we carefully observe these curious flaps, we shall find that they are studded all over with short hairs; not ordinary hairs, for you will see that each of them swells out towards its extremity. It is to the enlarged ends of these tiny hairs that a fly owes its power of holding on to the smooth surface of the window-panes.



A FLY'S FOOT, AS WHEN APPLIED TO THE CEILING.

Perhaps some of you have been at the sea-side, and have often noticed the limpets, which stick so hard to the rocks. There they stick, however the waves may beat against them, and they stick fast, too, as fast as if they were glued to the stone. Now, the same power that en-

ables the limpet to hold on so firmly to the rock, enables the fly, by means of those little hairs, to trot about upside down; for in principle the swelled-out ends of the hairs act in precisely the same manner as the body of the limpet.

With a little trouble, we can make, out of simple materials, a very good imitation of one of these hairs, sufficiently large to see how they act. First, we must get a piece of sole leather, and cut it into a circular shape, about two or three inches in diameter. We must then fasten to it a yard of string by means of a hole pricked in the middle of the leather, a knot at the end of the string preventing it from coming away. This knot should be so hammered against the hole that no air can get through the opening, or our experiment will fail.

Now, with this simple contrivance we shall, if we have made it properly, be able to lift stones of several pounds weight. But before we try and do so we must take care that the leather has been soaked some hours in water, to make it soft and pliable. We will now take hold of the free end of the string, and press the leather upon the stone we wish to raise. On gently pulling the string, we shall find that the leather has taken such a firm sucking hold upon the stone, that we can carry it from place to place; we shall also find that it requires some force to separate them.

The reason why the leather "sucker," as it is called, acts in this way, is because when we pull the string we raise up the

centre of the leather, and make a little tent-shaped hollow space there, between the sucker and the stone. The air cannot get into the little chamber thus formed, for the soft, wet leather fits closely to the stone all round it. But the air tries hard to force its way in, and it presses so closely upon the sucker that it actually sticks it all the firmer to the stone. The force that is exerted upon the sucker is called atmospheric pressure, and is exactly the same power which keeps the limpet on the rock and the fly's foot on the ceiling. You will by this time have guessed that the tiny hairs that I have been talking about have, at their ends, each one a sucker, and that these suckers are capable of supporting the weight of their owner.

A large number of insects are provided with these suckers, often of various sizes and shapes. In some parts of the world, India, for instance, there are little lizards, which run about like our house-flies, over the walls and ceiling. Their province is to feed on the flies, to which, in locomotive powers, they bear so much resemblance. There is another very familiar little animal which could not get on at all without such appendages. I mean the common leech. You have often an opportunity of seeing these animals exhibited in drug stores, in glass tanks of water. Sometimes you will see one of them changing his position by alternately fastening the sucker at each end of his body to the surface of the glass. He, in fact, uses his body as if it were a leg with a foot on each end. His movements are very much slower than those of the fly's foot; but his suckers act in precisely the same manner.

We can learn a lesson from the foot of the little house-fly, beyond what is taught by its beautiful structure, and the broad principle of atmospheric pressure on which that structure is based. It reminds us that everything in nature is worth inquiring into, for we shall always find that patient study of apparently unimportant things will reveal to us far more than we could ever imagine possible.

TRANSIENT TROUBLES.—Most of us have had troubles all our lives, and each day brought all the evil that we wished to endure. But if we were asked to recount the sorrows of our lives how many could we remember? How many that are six months old should we think worthy to be remembered or mentioned? To-day's troubles look large, but a week hence they will be forgotten and buried out of sight.

If you would keep a book, and every day put down the things that worry you, and see what becomes of them, it would be a benefit to you. You allow a thing to annoy you, just as you allow a fly to settle on you and plague you; and you lose your temper (or rather get it, for when men are surcharged with temper they are said to have lost it); and you justify yourselves for being thrown off your balance by causes which you do not trace out. But if you would see what it was that threw you off your balance before breakfast, and put it down in a little book, and follow it out, and ascertain what became of it you would see what a fool you were in the matter.

The art of forgetting is a blessed art but the art of overlooking is quite as important. And if we should take time to write down the origin, progress, and outcome of a few of our troubles, it would make us so ashamed of the fuss we make over them, that we should be glad to drop such things and bury them at once in eternal forgetfulness.

Life is too short to be worn out in petty worries, frettings, hatreds, and vexations. Let us banish all these, and think on whatsoever things are pure and lovely and gentle and of good report.

## ELEMENTARY GROUPS.

BY J. L. BARFOOT.

FOR the same reason that calcium (the lime metal) has an affinity for and unites with oxygen to form an alkaline earth (lime), other metals attract oxygen and form earths, or oxides of those metals. These are:

1. The Metals of the Alkalies: *potassium*, *sodium*, lithium, cesium and rubidium.

2. The Metals of the Alkaline Earths; barium, strontium and calcium.

3. The Metals of the Earths: *aluminum*, glucinum, zirconium, thoranium, yttrium, erbium, terbium, cerium, lanthanum and didymium.

4. The Magnesian Metals: *magnesium*, *zinc* and cadmium.

5. The Iron Metals: cobalt, nickel, uranium, *iron*, chromium and manganese.

6. Acid-making Metals: tin, titanium, niobium, tantalum, molybdenum, tungsten, vanadium, arsenic, *antimony* and *bismuth*.

7. The Copper Metals: *copper*, *lead* and thallium.

8. The Noble Metals: *mercury*, *silver*, *gold*, *platinum*, palladium, rhodium, ruthenium, osmium and iridium.

All of these metals unite with each other to form alloys, or compound metals. A compound of any metal with mercury is called an "amalgam." Mercury is a liquid metal. It is suspected that hydrogen is a gaseous metal. It is thought that another alkaline metal exists besides the three named above, which is named ammonium.

We thus perceive that the earth we live on is composed very largely of metals, not in the metallic state, but as earths (oxides) or analogous compounds. Those metals printed in Italics in the above list are the most important to remember, many of the others are of rare occurrence, or of comparatively little use to man.

Our young readers may familiarize themselves with these several elementary groups by studying the characteristics of some one element of each group. Thus all the alkaline metals behave like those printed in Italics in that group; that is, they have qualities greatly resembling each other; as oxides they form alkalies. This will be seen in noticing the qualities of our alkaline compounds, such as saleratus, sal ammoniac and common salt. The alkaline earths are so named because they have qualities resembling those of the alkaline group. The lime metal (calcium) has been already briefly noticed. Barium and strontium, belonging to the same group, are very similar in their qualities to that metal; and their compounds also have properties common to each. Of the earth metals, aluminum will enable us to study its qualities as a metal, and in its derivatives, or compounds, so as to get a clear conception of the entire group of metals to which it belongs. The elements are all of them worth noticing, but it will be well to pay the most attention to those which are most important to us for their uses. In our soap, we find the soda and potash metals; in our mortar, we have the alkaline earth metals; in our adobes and clay, the earth metals; in our blend ores and magnesium limestones, we have the magnesium metals; in our hematite and manganese ores, we have the iron metals. Our antimonial and arsenical ores will be shown to be acid producing compounds. Our copper and lead ores will exemplify the metals of the seventh group; and our gold, silver and mercury will be shown with the group of the noble metals.



## A METHODIST REVIVAL.

BY ELDER P. P. PRATT.

*Written from Shady Grove, Hickman Co., Tenn.,  
September 27, 1878.*

LAST evening, by invitation of friends, Brother Thos. S. Higham and I attended the closing exercises of a Methodist revival meeting, held in a grove not far from this place. The performances at the gathering were of such an extraordinary and novel nature, that I thought a brief account of the same might be of interest to the young readers of the INSTRUCTOR, if not to their parents.

Arriving at the place of meeting soon after early candle light, we found the church crowded with a respectable-looking congregation, of about two hundred people. The males occupied the right hand seats and the females those on the left; with four ministers in the stand, opposite the door.

One of the elders read one of Wesley's hymns, which was sung by the members of the church. Then came the opening prayer, offered up amid groans and sighs and many amens, the burden of which was that God might come down and make one in their midst in the conversion of sinners. All who were outside of the pales of the church seemed to be regarded as "sinners, fast asleep in the arms of the devil, with the fiery flames of hell surging and seething around them!"

At the close of the prayer another minister arose, and took for his text, Psalms, ix, 17: "The wicked shall be turned into hell, and all the nations that forget God." His opening remarks were quite good, but as he warmed up, the subject being a hot one, he seemed to lose his balance. He made a great effort—not to convince his hearers of the truth but—to frighten them into a profession of religion. At one time he would portray before the congregation the great uncertainty of life. At the next moment he would try to work up on their sympathies by referring to the great ravages in the yellow fever districts. Then, in imagination, he would suspend for a few moments the sinner, "held only by a single hair," over a burning lake of fire. Again he would picture out in awful language the "eternal" wretchedness and misery of the damned. He wound up his remarks by saying that all unconverted sinners would be "driven like a herd of swine by God Almighty, into hell! by the hundred! by the thousand! by the million!!! never to be redeemed, but there to welter for ever and ever, where the worm dieth not and the fire is not quenched."

After his address, the presiding elder, a Mr. Cherry, arose, rubbing and clapping his hands, and throwing his head back. He cast his eyes, at first, heavenward, then closed them, and in that posture narrated a heart-rending fable of a young child that was lost in the woods. Then leaving the "sacred desk," he and his brother ministers went from seat to seat exhorting the people to come to the "anxious seat," and he prayed for. Taking some by the hand, with groans and warnings, they succeeded in getting five persons to go forward to the "mourner's bench."

Not satisfied with this, they invited the members of the church to assist them in the "good work." Then came a general uprising of the whole congregation, who, with feverish excitement, crowded around the mourners, forming a great circle, eager to hear and see what was going on at this point of the proceedings.

The sexes mingled freely together. Some were praying, others singing, shouting or speaking, the whole being mingled with groans, sighs and tears.

The ministers would put their hands upon the heads of females, throw their arms around their necks, and plead with them to accept of Jesus. One sister of the church, following the example of the others, placed her arms gently around the neck of a penitent sinner, and plead with him to throw himself into the "arms of Jesus." Another was "wrought upon" in a wonderful manner: at one time she would be as sad and as gloomy as the grave; the next moment she would break out with a hysterical laugh, and make out she was so happy. It was a perfect babel of confusion.

At this juncture, the words of Paul came forcibly to my mind: "God is not the author of confusion, but of peace, as in all churches of the saints." But, although I had the right to think I could not speak; for if I had done so, I should have been considered guilty of disturbing religious worship.

At a late hour at night the services closed, the presiding elder giving out that on the following day he would administer the rite of baptism by "sprinkling, pouring or immersion, as the candidate might wish." Again, I could not help comparing this with the words of Paul: "One Lord, one faith, one baptism." As the assembly withdrew, shouting continued, and the tears did not cease to flow, and even after returning home a mile away, the groans of the lingering mourners could be distinctly heard. Some of the neighbors complained of being kept awake until 11 or 12 o'clock at night.

Innocent young boys and girls, of twelve or fourteen summers, whose hearts and sympathies are tender, and who are easily wrought upon under the pressure of religious excitement, are over-persuaded by these preachers at such "revivals" and are made to believe that they are converted and have got religion. Much time is taken up in begging for money, and, financially, these meetings generally pay well. This is a fair sample of how many get religion in this part of the world. In justice, however, to the people, I must say there are many intelligent persons who look upon these protracted (distracted) meetings as a disgrace and a humbug. Several complained that the meeting I have described was tame and spiritless compared to those which had been held on the two previous nights. Ministers and singers were hoarse with preaching, shouting, etc. People flock to these revival meetings from miles around—some for sincere worship, some for society, or to see and be seen; while others go as they would go to a theatre or a concert, for the excitement of the thing, to be entertained and amused.

I have been to a great number of meetings of different sects and parties, but I never witnessed such a scene before. To me it was painful. The children of the Saints should be very thankful that they live in Zion, where they can be taught true principles, by the living oracles of God, and where they are free to a very great degree from the errors, follies, darkness and superstition of a wicked and benighted world.

BOYS, HELP YOUR MOTHERS.—We have seen from two to six hearty boys sitting by the kitchen stove, toasting their feet, and cracking nuts or jokes, while their mother, a slender woman, has gone to the wood-pile for wood, or to the well for water, or to the meat-house to cut a frozen steak for dinner. This is not as it should be. There is much work about the house too hard for women. Heavy lifting, hard extra steps, which should be done by those more able. Boys, don't let your mother do it all, especially if she is a feeble woman. Dull, prosy housework is irksome enough, at best.

## THE MEXICANS.

BY J. Z. S.

IN the United States, the name Mexican is generally applied to all those whose forefathers have married among the Indian blood, no matter whether they were born in Mexico or in the United States. In Mexico, all those who are native-born are called Mexicans, except the Indians, who are called *Indios*, or Indians.

The Mexicans are nearly all Roman Catholics, and the female portion are very much devoted to their religion. There is but little attention given to learning, and the result is that there are very few indeed who have received a good common school education. The more wealthy portion of the community use the poor as "pion" (slaves) to the same extent that the Negroes in the south were, except that they are better treated than the slaves were in many instances.

After Maximilian was killed, Juarez, an Indian, became president of Mexico, who caused much better laws to be made, and repealed the "pion" law; but it had existed so long, and the ignorance of the poor is so great, that pionage is still in practice, but not to the extent that it was before the law was repealed.

According to the old pion law, a child could be sold to pay the priest for the funeral services of its father, grandfather, or great grandfather.

The holy scriptures, in many places, condemn those who "preach for hire and divine for money," who think that "the gifts of God can be purchased with money," yet the Catholic priests require pay for every ordinance of the church. I have known poor people to pawn their clothes to get money to pay the priest for baptizing their infants. They are taught that all infants that die without baptism go to "limbo," or hell.

There is very little improvement among the Mexicans, and they are very far behind the Americans in almost every respect. They work their oxen by means of a straight stick, tied to and behind the horns, instead of a yoke. They plow their ground with a forked stick, or a kind of plow made of wood, having but one handle, a pole answering for a tongue; and they use a pole with a tongue in the middle of it for a harrow. They cut their grain with the sickle, haul it home on wooden carts, or pack it on jackasses, and thresh it out with horses and goats. Their wooden carts have no iron about them, and, as they are never greased, they can generally be heard for the distance of one mile. In going up a steep hill when loaded they are liable to tip up, causing the load to fall out behind, or raise the oxen off the ground. It is very seldom indeed that a log chain is seen, as they use rawhide straps instead; and instead of a whip to drive with, they use a long stick, which they sharpen at one end.

During the warm season of the year they dress in factory. The women do nearly all their grinding, using for the purpose the "metat," or Indian mill, which is a very important article of household furniture. They grind their corn and wheat between these rocks, mix the flour without yeast, make it into very thin cakes and bake it on a heated rock. They have no stoves, and, in many instances, not so much as a frying pan, their cooking utensils being mostly pottery-ware.

Their principal articles of food are "tortillas," (thin cakes) and beans, seasoned with red pepper; and occasionally a little meat.

On one occasion I was invited to breakfast with a Mexican school teacher. The meal consisted of tortillas and a bowl of

red pepper, prepared by being ground and boiled, with perhaps some other ingredients, until it was about as thick as gruel. There were no knives, forks, or spoons provided, and I was at a loss to know how to commence to eat. My host observed my embarrassment and related the following:

"On a certain occasion, a number of gentlemen of different nationalities were conversing concerning the customs in different countries, at table. An American remarked that the custom among his people was to have one or two changes of dishes during a meal. A Frenchman said that in France they were changed three or four times. A Mexican spoke up, saying, 'Our custom is to change every mouthful.' All were anxious to know why that was. The Mexican explained that they made a spoon of the tortilla with which to eat the beans, or red pepper, and at every mouthful they ate up the spoon."

I then knew how to eat my breakfast.

It is needless to say that a taste of the red pepper, was quite sufficient for the first meal; but before leaving their country, I could eat it and enjoy it as well as they.

The Mexicans are the most hospitable people I was ever among, and will divide even to the last meal with a hungry stranger.

## CAPTURING SEA-LIONS

A SINGULAR method is annually employed by the natives of St. Paul's Island, Alaska, for the capture of the sea-lion. Here is an island, which, instead of presenting an almost unbroken line of bold, abrupt cliffs to the sea, like its fellows in the North Pacific, offers to the landing seals a low, though gradually rising ground. Taking advantage of this topography, the natives of St. Paul's Island secure every season hundreds of sea-lions, with but a tithe of the labor and exposure by which their capture is attended at other places. Eleven miles north east from the village on St. Paul's Island is a point upon which a large number of sea-lions annually repair for the purposes of breeding, etc, but as this animal is timid, and sure to take to water when brought into the presence of man, its capture requires much discretion and boldness on the part of its captors, who are chosen every season from the village people, with especial reference to their physical qualification for the work. The "sea-richie," as the natives name them cannot be approached successfully by daylight; so the hunters, ten or twelve in number, rendezvous in a hut near by until a favorable night comes on, when the moon is partially obscured by drifting clouds and the wind blows in from the rookery. Then they step down to the beach, at low water, and proceed to creep flat on all fours over the surf-beaten sand and boulders up to the dozing herd and between them and the water; in this way a small body of men crawling along in Indian file may pass unnoticed by the sea-lion sentries, which doubtless in the uncertain light confound the forms of their human enemies with those of seals. When the creeping natives have all reached the strip of beach which is left bare by ebbtide between the water and the unsuspecting animals, at a given signal, the hunters leap at once to their feet, shout, yell, and brandish their arms, while the astonished and terrified lions roar and flounder in all directions. If, at the moment of surprise, the brutes are sleeping with their heads pointed towards the water, they charge straight on in that way, directly over the men; but if their heads have been resting pointed landward, they follow that course just as desperately, and nothing will turn them, at first, either one way or the other. Those who charge for the water are lost, of course, but the natives promptly follow up

the land leaders with a rare combination of horrible noises and demoniacal gesticulations until the first frenzied spurt and exertions of the terrified animals completely exhaust them, and then, panting, gasping, prone upon the earth, they are extended at the mercy of their cunning captors, who gently urge them along up to the hut in which they have been keeping watch during several days past, for the night in which to make this effort. Here the natives have what they call their pen or cage, in which the lion-like seals, as they are captured from night to night, are collected and retained until a sufficient number, or a drove of three or four hundred has been secured. This cage is nothing more than a succession of small poles stuck at wide intervals over a circle, in the ground; these poles are decked with fluttering strips of white cotton cloth, and light ropes are loosely stretched from one to the other. Within this flimsy circle the sea-lions are securely imprisoned, and though incessantly watched by two or three men, they scarcely make an effort to escape, but their roaring is almost deafening, while they constantly writhe and twist over and against one another like a handful of angle-worms in a saucer.

### HOW BIRDS FLY.

YOU will find, if you carefully examine a bird's wing, that all the bones and muscles are placed along the front edge, which is thus made very stiff and strong. The quill feathers are fastened in such a way that they point backward, so that the hind edge of the wing is not stiff like the front edge, but is flexible and bends at the least touch. As the air is not a solid, but a gas, it has a tendency to slide out from under the wing when this is driven downward, and, of course, it will do this at the point where it can escape most easily. Since the front edge of the wing is stiff and strong, it retains its hollow shape, and prevents the air from sliding out in this direction, but the pressure of the air is enough to bend up the thin, flexible ends of the feathers at the hinder border of the wing, so the air makes its escape there, and slides out backward and upward. The weight of the bird is all the time pulling it down toward the earth; so at the same time that the air slides out upward and backward toward the bent edge of the wing, the wing itself, and with it the bird, slides forward and downward off from the confined air. It is really its weight which causes it to do this, so that the statement that a bird flies by its own weight is strictly true.

This is true, also, of insects and bats. They have wings with stiff front edges, and flexible hind edges, which bend and allow the air to pass out, so that flying is nothing more than sliding down a hill made of air. A bird rises by flapping its wings, and it flies by falling back toward the earth and sliding forward at the same time. At the end of each stroke of its wing it has raised itself enough to make up for the distance it has fallen since the last stroke, and accordingly it stays at the same height and moves forward in a seemingly straight line. But if you watch the flight of those birds which flap their wings slowly, such as the woodpecker, you can see them rise and fall, and will have no trouble in seeing that their path is not really a straight line, but is made up of curves; although most birds flap their wings so rapidly that they have no time to fall though a space great enough to be seen. Birds also make use of the wind to aid them in flight, and by holding their wings inclined like a kite, so that the wind shall slide out under them, they can sail a great distance without flapping their wings at all. They are supported, as a paper kite is, by the wind which is continually pushing against their wings, and sliding out backward, and

downward, thus lifting or holding up the bird, and at the same time driving it forward.

The birds are not compelled to face the wind while they are sailing, but by changing the position of the wings a little they can go in whatever direction they wish, much as a boy changes his direction in skating by leaning a little to one side or the other. Some birds are very skillful at this kind of sailing, and can even remain stationary in the air for some minutes when there is a strong wind; and they do this without flapping their wings at all. It is a difficult thing to do, and no birds except the most skillful flyers can manage it. Some hawks can do it, and gulls and terns may often be seen practicing it when a gale of wind is blowing, and they seem to take great delight in their power of flight.

*Selected.*

### A SUNKEN CITY.

AN extraordinary story comes from Switzerland, which, if corroborated, will draw to the banks of Lake Lemman archaeologists from all parts of the world. Recently a small boat containing an American gentleman was capsized on the lake just opposite the village of St. Prechts, the gentleman receiving no harm, but his valise going to the bottom. The portmanteau contained articles of value, so its owner called to his aid two divers, who speedily brought to terra firma the American's luggage, and with it a superb vase of antique make, an enormous piece of white marble, and several petrifactions. These were examined with interest; but this was not the most singular part of the affair.

The divers recounted that when at the bottom of the lake they were conscious of treading upon a surface so unequal that several times they were nearly losing their equilibrium. From what they observed, they gave it as their opinion that the inequality of the surface was due to the fact that they had been walking upon the roofs of houses, and this being communicated to the authorities at Morges and St. Prechts, several of the notabilities went in a boat to the spot indicated, and caused a quantity of oil to be thrown upon the surface of the lake, which, as is well known, has the property of rendering water transparent.

Gazing down upon the depths below, the investigators clearly distinguished a town of apparently considerable extent in the lake—streets, detached houses, and large buildings being distinctly visible. The town, which it is stated consists of upwards of two hundred houses, has at its extremity a large, square tower, which was not, properly speaking, unknown to boatmen, since, in calm weather, its summit was visible at about ten metres below the surface of the lake, but until the recent discovery it was commonly supposed to be a rock.

The Swiss authorities, anxious to investigate the subject more thoroughly, have voted a sum of money for the construction of a vast jetty, which will inclose the under-water town, and communicate with the banks of the lake. This done, nothing, we are told, will be easier than to draw off the water, and restore to the light of day a town that has been buried for a very great number of years.

THE PUMPKIN VINE AS AN ORNAMENT.—We don't think the coarse vine that supports the pumpkin, very ornamental, and would never think of training one over a verandah, for instance, but a late traveler tells of one place where it is often allowed to run over the whole cottage, and grow and ripen its golden fruit on the roof. It is on the island of Fernando Noronha, in the Atlantic Ocean.

## CHILDREN OF ZION, JOIN AND SING

WORDS &amp; MUSIC BY R. B. BAIRD.

*March movement, lively.*

Children of Zi-on, join and sing Praises to God, our heavenly king; He who was slain that we might be

Ransom'd from sin and in - i - qui - ty; Think of His suff'ings on the tree, Think how He bled for

you and me; Cher - ish His kindness, rev'rance pay, Fol - low His pre-cepts day by day.

Seek out His plans, His words sustain,  
Faithful to all His laws remain,  
Flee from temptation while in youth,  
Shun every evil and seek the truth;  
He will as-sist us, if sincere—  
Doubt not His love for those who fear,  
Trust in His promise, ask His aid—  
He will reward each effort made

If we will firm and faithful stand,  
If we are true to His command,  
He will protect and guard our way,  
Free from all troubles, every day;  
All that is promised He'll bestow,  
Blessings to us will freely flow;  
Let His example be our guide,  
Fearless of all the world beside.

## EDISON AND ELECTRICITY.

MANY years ago it was stated in the INSTRUCTOR that electricity would probably become useful to man as a substitute for coal and gas, for heating and illuminating purposes. This, it seems, has been partially accomplished by Edison, an inventor of no ordinary merit. We live in an age of wonders, children. God has declared, in speaking by the prophets both in ancient and modern times, that knowledge shall be increased. This is the age the inspired servants of the Lord had reference to. Never was there such a flood of light shed over the earth as to-day. It will continue to be so until the purposes of Deity shall be accomplished; when this earth shall be perfected; and the more rapidly man becomes perfected, by doing the will of God on the earth as it is done in the heavens, the sooner will the earth become a heaven for man.

Let us be thankful that there is at least one place on the earth, even in these valleys, where men can be taught how to live in accordance with the laws of God; so that a people can be prepared to live on this earth in its glorified condition; when there shall be "nothing to hurt or destroy in all this holy mountain."

B.

ANGER always hurts us more than the one we get mad at.

## CHARADE.

BY J. J. C.

My first is the name of an ancient king,  
Of whom the ancient poets sing;  
A mighty man, of stature large—  
Of three-score cities he had charge.

My second is the home of brutes,  
Preferring flesh to choicest fruits;  
My whole, a city is, or town,  
In Utah, of no small renown.

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